

(6)

## ON THE SUBJECT OF PRIORITY

IN THE

# Medication of the Larynx and Trachea.

BY

HORACE GREEN, M. D.

[From the American Medical Monthly, April, 1854.]



I FEEL that some apology may be considered due from me to the readers of the MONTHLY, and to my professional brethren generally, for claiming their attention to the matter of *priority* in the application of a solution of nitrate of silver to the interior of the larynx and trachea.

If so, let it be remembered—as many of the profession certainly will remember—that, when the subject of cauterizing the mucous membrane of the air passages was first brought before the medical public, many years ago, by the writer; when it was asserted that a sponge-probang loaded with a solution of nitrate of silver, “could, not only without injury, but with manifest advantage in disease, be passed through the glottis and larynx down into the trachea;” that then, the *savans* in the medical profession pronounced it an “anatomical impossibility,” an “unwarrantable innovation in practical medicine;” whilst many others, anxious to echo these sentiments, but less cautious of their phraseology, did not hesitate to denounce the author a charlatan, and his practice a “humbug!” If, in connection with these antecedents, it is remembered that now, when this once condemned practice has gained adherents among the best of the profession in every country, and is admitted, by high authority, to be not only a “most valuable addition to practical medicine, but that the results of this method of treatment will lead to important changes in the prophylaxis and cure of pulmonary phthisis;” \* when nearly all the leading journals of Europe have

\* British and Foreign Medical Review, Vol. XXIV., p. 504.

reviewed and, in every instance, have commended the practice; when many foreign books and monographs have been written on the different diseases of the air-passages for which this treatment is appropriate, in all of which reviews and works, the credit of the introduction of topical medication to the air-passages has been accredited to the writer;—When, I repeat, after all these things, the attempt is now made in Europe (as it had been done repeatedly before in this country, and by those too who were, at first, the foremost and the loudest to denounce the practice and its author) to give the priority of the treatment to others, who never shared, in any degree, in the obloquy attending its introduction; it will be admitted, I think, that there is a propriety in submitting to the candid portion of the profession, the question involved in the following statement of facts.

A few days ago, my friend, Dr. Mott, of this city, put into my hands a copy of the *Gazette Hebdomadaire de Médecine et Chirurgie*, which was published in Paris, Jan. 27th, 1854. This No. of the *Gazette Hebdomadaire*, which is a widely circulated medical journal, contains the following letter, addressed to the editor, by Dr. John G. Adams, of this city.

“MONSIEUR LE REDACTEUR—

J'ai, par l'obligeant intermédiaire de M. Robert, fait hommage à la Société de Chirurgie, dans sa séance du 4 Décembre, 1853, d'une tige porte éponge à trois branches, entièrement semblable, *pour la forme*, à celles dont on se sert aujourd'hui à New York, avec les modifications imaginées par M. le docteur Buck, Chirurgien de New York City Hospital, et les perfectionnements de M. Charrière, fils. Permettez moi d'entrer, à cette occasion, dans quelques détails historiques et pratiques.

La priorité a été réclamée, au sujet de l'invention de l'instrument lui-même et au sujet de son introduction dans la cavité laryngienne.

Je puis affirmer, après des recherches consciencieuses, que l'instrument a été imaginé par M. le docteur David Green, dans le but d'appliquer une solution de nitrate d'argent au larynx, au pharynx, et à l'œsophage. Il se servait d'abord d'un cathéter mâle, avec un morceau d'éponge attaché au bout par un fil. Après plusieurs expériences, il a fini par adopter une tige en baleine, courbée en quart de cercle avec une éponge attachée par des fils solides. Cet instrument avait un inconvénient: les fils s'usaient en peu de temps; l'éponge pouvait se détacher, accident des plus graves si elle eût été à ce moment engagée dans le larynx. En outre, on était obligé d'avoir un grand nombre d'instruments, pour ne pas employer la même éponge chez plusieurs malades. M. Buck a fait fabriquer une pince d'argent, à deux branches, avec un anneau coulant destiné à fixer l'éponge. Enfin, plus récemment, ayant eu occasion de demander une pince semblable, à M. Charrière, fils, celui-ci jugea utile d'y ajouter une troisième branche, pour mieux retenir l'éponge et éviter tout danger d'échappement. Dans l'instrument ainsi construit, une des branches est munie d'un point d'arrêt, par-dessus lequel peut passer un anneau coulant constricteur, à l'aide d'une encoche de baïonnette; une fois que l'anneau a traversé le point d'arrêt, on

lui fait exécuter un demi-tour, et alors, ne pouvant plus reculer, il fixe l'éponge de la manière la plus solide.

Maintenant, qui s'est servi le premier de cet instrument, pour porter une solution caustique jusque dans le larynx? M. Horace Green, de New York, soutient, dans l'introduction de son ouvrage sur la bronchite, qu'en 1841, deux ans avant la publication de la traduction en Anglais de l'ouvrage de MM. Trousseau et Belloc, il avait l'habitude d'appliquer la cauterization au larynx. Je dirai, à ce sujet, que les travaux de MM. Trousseau et Belloc étaient ultérieurement connus en Amérique, où M. le Professeur J. M. Smith en avait parlé dès 1828, dans ses leçons à l'Université de New York.

En France on a mis en doute la possibilité d'introduire l'éponge jusque dans le larynx. J'ai, pourtant, constaté ce fait par trois fois, de la manière la plus formelle.

M. Green va plus loin : il affirme avoir pénétré *dans la trachée jusqu'à sa bifurcation*, et cela facilement et sans inconvénients. Je me borne à répéter l'assertion.

Agréez, etc."

"JOHN G. ADAMS,

Ancien Secrétaire de l'Académie de Médecine de New York,

Ancien éditeur du *Medical Times* (New York), etc."\*

\* [TRANSLATION.]

"Mr. Editor—

Through the kind intermediation of M. Robert, I submitted to the Surgical Society, at its meeting on the 4th of December, 1853, a sponge probang, with three prongs, exactly similar, in respect to form, to those now in use in New York, with the modifications invented by Dr. Buck, Surgeon of the New York Hospital, and the improvements added by M. Charrière. Allow me, at this time, to enter into a few historical and practical details.

The priority of the invention of the instrument itself, as well as of its introduction into the laryngeal cavity, has been a matter of dispute.

I can affirm, after conscientious investigation, that the instrument was invented by Dr. David Green, with the design of applying a solution of nitrate of silver to the larynx, the pharynx, and œsophagus. He, at first, made use of a strong catheter, with a bit of sponge fastened to the end with thread. After several experiments, he finally adopted a whalebone, curved in the form of a quarter circle, with a sponge fastened by strong thread. This instrument was inconvenient in one respect: the thread became worn after a little time, and the sponge might get unfastened, an accident which would be attended with the gravest consequences should it occur while in the larynx. Besides, it was necessary to have a great number of instruments, in order not to use the same sponge for several patients. Mr. Buck caused silver forceps, with two prongs, to be manufactured, with a sliding ring intended to fasten the sponge. Finally, having recently had occasion to procure similar forceps from M. Charrière, he (M. Charrière) judged it expedient to add thereto a third prong, in order the better to hold the sponge, and to avoid all danger of escape. In the instrument thus constructed, one of the prongs is armed with a catch, above which a sliding ring can pass, by means of a notch and slide of the form used to fasten bayonets; when the



That attempts to do me injury were being made among my professional *confrères* abroad, and especially with those who have honored me with their acquaintance and correspondence, I have been for some time fully aware. Indeed, before Dr. Adams reached Europe I was given to understand, from a reliable source, that such efforts would be made; and these intimations were fully confirmed by letters subsequently received from my friends in Europe, and through other sources. This matter, then, comes not unexpectedly, and I have only been waiting for some such public manifestation as is exhibited in the above letter, to counteract, in the best way in my power, the injuries attempted to be wrought by Dr. Adams, in the fulfilment of his *honorable* and *patriotic* mission.

With regard to the *priority* in the invention or improvement of this particular instrument, I have nothing to say, although every medical man who has visited me during the last four or five years, might have seen an instrument, its counterpart in every essential characteristic, which has been in use in my office since 1849. This instrument for cauterizing the larynx was invented by my friend and assistant, Dr. J. W. Richards.

This matter of the instrument, however, is of but little moment; yet Dr. Adams considered an improvement, or slight modification, in a throat probang, made by "Dr. Buck, of the New York Hospital," of such grave importance, that he first induced M. Robert to bring it before the Society of Surgery, in Paris; and then publishes, with a drawing, a full description of it, in one of the leading French medical journals! In doing this, however, Dr. A. takes the occasion to utter so many misrepresentations (not to characterize these acts by a harsher term) with respect to myself, and the priority

ring has once passed the catch, it must be turned half-way round, and then, not being able to slip back, the sponge is fastened in the strongest manner.

Now, who first made use of this instrument to carry a caustic solution into the larynx? Mr. Horace Green, of New York, declares, in the introduction to his work on bronchitis, that, in 1841, two years before the publication of the English translation of MM. Trousseau and Belloc's work, he was in the habit of applying cauterization to the larynx. I will say, upon this point, that the labors of MM. Trousseau and Belloc were further known in America, where Professor J. M. Smith had spoken of them as early as 1828, in his lectures at the University of New York.

In France, the possibility of introducing the sponge into the larynx even, has been doubted. I have, however, fully proved this fact three times in the most formal manner. Mr. Green goes farther: he affirms that he has penetrated *into the trachea as far as its bifurcation*, and that too, easily and without inconvenience. I limit myself to a repetition of the assertion.

Accept, &c.,

JOHN G. ADAMS,

Former Secretary of the Academy of Medicine, of New York,

Former editor of the Medical Times (New York)."

of the introduction of medication into the cavity of the larynx, and has made these statements, as I have learned from other sources, to many of my professional friends in Europe, with the manifest intention of injuring me in their estimation, that I feel compelled to adduce certain facts, which can be fully substantiated, and which will disprove most emphatically the assertion of Dr. Adams.

In the first place, Dr. A. declares, that the priority of invention of the instrument for cauterizing the larynx, as well as that of its introduction into the laryngeal cavity, has been a matter of dispute.

2d. That after "conscientious investigations," he can affirm that the instrument was invented by Dr. David Green, with the design of applying a solution of nitrate of silver to the larynx.

3d. That "*Mr. Horace Green, of New York, declares, in the introduction of his work on Bronchitis, that in 1841, two years before the publication of the English translation of MM. Trousseau and Belloc's work, he was in the habit of applying cauterizations to the larynx.*"

That "the labors of Trousseau and Belloc," Dr. A. will say, were known in America, where Professor J. M. Smith had spoken of them, as early as 1828,\* in his lectures at the University of New York.

Now, each and all of these assertions, as Dr. A. "conscientiously" knows, are without any foundation in truth.

The facts, in relation to the history of the instrument for medication of the air-passages, and of the diseases for which this practice was particularly instituted, are briefly these. In 1832, as I have stated in my work on "*Diseases of the Air-Passages*" (p. 45), a case of well-marked *follicular disease* came under my notice. It occurred in a clergyman in New England, and was the first case to which my attention had ever been called. The disease had extended into the larynx, producing constant irritation in those parts, and an entire loss of voice; and this in a robust individual, otherwise in good health. All the ordinary means of treatment then known for laryngeal diseases, such as local depletion, counter-irritation externally, with alteratives and antimonials internally, were perseveringly employed, without in any degree relieving my patient. During the treatment of this case, another of equal interest and importance came under my observation. This patient was the Rev. Dr. Lindsly, then the officiating clergyman of Park Street Church, in Boston, who, from the severity of the disease, was

\* The works of Trousseau and Belloc were not published in Paris until 1837, yet Dr. A. affirms that they were known in America, "where Professor J. M. Smith had spoken of them in his lectures at the University of New York, as early as 1828"! This is a remarkable *anachronism* to be made by one who claims to be so "conscientious" in his researches.

obliged, for several years, to relinquish altogether his official duties. The similarity of the symptoms in these two cases, the persistence of the disease, and the utter failure of all treatment to benefit my patients, called my attention, very decidedly, to all these points. It was in the first years of my professional life, and, until then, I had not lost my faith in the certainty of the healing art. From this time, I set about my inquiry into the nature of a disease whose pathology and treatment could not, I was confident, be found in the books. For this purpose, when I could leave my country practice, I visited, at different periods, the principal hospitals in the United States. I addressed letters of inquiry, on the subject of this disease, to eminent medical men, as some of them, now living, will remember. I collected together the history of a large number of cases of the disease, then called "Clergyman's sore throat," "Throat ail," &c.; and from all these, and from subsequent observations, I adduced those views which I have elsewhere given, of the nature and pathology of "Follicular Disease of the Air-Passages,"—views which, in this connection, I may be permitted to say, have been since adopted by almost all pathologists who have written on the subject. In 1838, two years after my removal to this city, I visited the hospitals of Europe; and one of the principal reasons for making this tour was, to ascertain from the medical *savans* in Europe, if any discoveries or improvements had been made by them in the pathology and treatment of laryngeal and pulmonary diseases. It was whilst absent at this time, as I have before stated in my writings, that I obtained, in a conversation with Sir James Johnson, of London, who has since died, the first idea I had ever entertained of the possibility of entering the cavity of the larynx with medical agents. At this interview, in alluding to the difficulties and the uncertainty which attended the treatment of laryngeal disease, Dr. Johnson intimated that all modes of treatment would fail us, until appropriate therapeutic remedies could be applied directly to the lining membrane of these parts. This observation, in connection with my past experience of the nature of the disease, and especially of its local character, made on my mind an abiding impression.

As I state in the introduction of my work, I returned home from Europe the middle of November, 1838. On the 26th of November, ten days after my arrival in New York, the Rev. Mr. Tilden, of Rutland, Vermont, who had suffered many months under follicular laryngitis, came under my care, and was treated by topical applications of the nitrate of silver to the pharynx and larynx. The history of this case I find recorded in full in my case book at the time; and, moreover, Mr. Tilden still lives and will testify to these facts. In the course of 1839, I treated many cases of laryngeal disease, by topical medication; and in November, 1839, I reported before the "New York Medical and Surgical Society" (of which Dr. Adams was



at that time a member), some ten or twelve cases of chronic laryngitis,—as the records of that Society will show,—which had been treated by me in the same manner ; and yet Dr. A. attempts to convey the impression, by a direct misrepresentation in regard to what I have said in my introduction, that it was not until 1841 that “ Dr. Green was in the habit of applying cauterizations to the larynx.” But, on this point, I have only to give Dr. Adams’ own testimony. In the proceedings of the meeting of the New York Medical and Surgical Society, held Sept. 19th, 1840, is the following record : “ Dr. Green made some remarks on laryngitis, particularly as it occurs in clergymen ; considers the disease as commencing in the fauces and throat. The larynx does not become involved until some time afterwards. Has generally succeeded with local applications and constitutional remedies. Latterly, has used with advantage a strong solution of nit. argent, x to xxx grs. to  $\frac{3}{4}$  i water, *introduced into the glottis by a sponge and probang*. Fifteen cases reported in all.”

This record of the doings of the Society is in Dr. Adams’ *own handwriting*, and has appended to it the signature of “ JOHN G. ADAMS, *Sec’y.*” If any further proof is necessary to establish the very strange perversity of Dr. Adams, in this matter, it may be found in the following facts ; all of which can be fully substantiated.

In 1843, four years after I had employed cauterization of the larynx with the sponge-probang, and *one year* after Dr. A.’s own testimony to this fact, the man to whom he now gives priority, *Dr. David Green*, called at my office, and saw, for the first time, my instruments for the treatment of laryngeal and bronchial disease by topical medication. I had not met Dr. Green before, and at this interview I not only exhibited my instruments, but explained to him my method of introducing medication into the air passages ; and it was after this that Dr. G. employed the same form of probang that I was then using, and had been employing for several years. Dr. Green at this time made no allusion whatever to the subject of his ever having made any attempt, by means of any instrument, to cauterize the larynx. If he had done it previous to 1838, he certainly should be able to give names and dates, and thus establish the claim made by Dr. A. to “ priority.” Dr. Adams, however, knew well, when he addressed his letter to the editor of the Gazette, that neither Dr. David Green or any other man preceded me in this matter. He knew perfectly well that as late as 1847, a part of the members of the New York Medical and Surgical Society (and these are historical facts in the unwritten proceedings of medical *cabals* in our city), who had condemned the practice of topical medication, and had repeatedly and publicly denied the possibility of cauterizing the interior of the larynx—that these men formed themselves into a *clique*, of which he was one of the most active members, for the acknowl-

edged purposes of effecting my professional ruin; and all this for the reason, and only for this reason, that I would persist in employing, and had written a book recommending, topical medication in the treatment of laryngeal and bronchial diseases; a practice which the chairman of their committee (Dr. J. A. Swett) appointed to inquire into the matter, declared to be "a dangerous and an unwarrantable mode of treatment." He knew, too, that he was one of the "*thirteen*," who, for the above cause, and to effect the purpose to which I have alluded, obtained a majority vote in the New York Medical and Surgical Society, on the following preamble and resolution; namely, that, "Whereas, Dr. Horace Green has rendered himself disagreeable to a majority of the members of this Society, therefore, resolved, that he be requested to withdraw from the Society." Thus violating the constitution of the Society, and outraging every honorable principle of professional or gentlemanly associations.

Dr. Adams also knew that his "conscientious researches" consisted in this: that several members of this very party, after the practice which they had failed to suppress had gained credit with the profession, called on Dr. David Green (as Dr. David Green himself assured me), and "endeavored to persuade him to testify that he had preceded me in making medicinal applications to the cavity of the larynx"! But this Dr. Green refused to do.

"I limit myself" to this record of facts with regard to the first and principal statements in Dr. Adams' letter.\*

It remains for me to examine briefly that portion of Dr. Adams' communication, in which he refers to the labors of MM. Trousseau and Belloc, and in which he endeavors, by a direct misstatement, as I have shown, in regard to facts and dates, to convey the impression that I have not accorded to these distinguished writers the honor which is their due. This is not a recent accusation. It originated with a portion of the members of that society to which I have alluded; and on the publication of my work on Diseases of the Air-Passages, it was reiterated; and it was also asserted by several medical journals in my own country, that "in applying topical remedies to the laryngeal cavity, I had done so after the manner of MM. Trousseau and Belloc."

As this is not true, for I commenced with my method of cauterizing the

\* Should Dr. A. for any reason be unable to bring to mind these reminiscences of the past, he must be able, I am quite sure, to recall the fact that, several years before the last events to which I have alluded, he placed himself under my care, and was treated (successfully, I believe) for pharyngo-laryngeal disease, by excision of the uvula, and topical applications of the nitrate of silver to the diseased parts. If the question should arise in the minds of any of the readers of the MONTHLY, why, under these circumstances to which I have alluded, Dr. A. did not apply for professional aid to the physician who, from having been the first to practice cauterization, as Dr. A. affirms, must have been the most experienced expert, I cannot answer.



larynx before I knew of the writings of Trousseau and Belloc; and inasmuch as this question has not been considered, so far as I know, by any writer here, I shall take the opportunity to show that foreign authors have accredited to me an honor which many of my own countrymen have evinced great anxiety to deny me. In none of my writings have I claimed priority in medicating the mucous membrane of the larynx. On the contrary, it will be seen by a reference to the work of which I have spoken, that I have there expressly said, that "to MM. Trousseau and Belloc belongs the honor of having been the first to prescribe and employ topical medication in chronic diseases of the larynx," p. 203. This, however, I do claim, that I was the first to pass a sponge-probang, loaded with a strong solution of nitrate of silver, below the epiglottis, through the larynx and rima glottidis, down into the trachea; thus reaching, with more certainty and more effectually, the disease of these parts. I claim that I was the first to apply topical medication, in *this way*, in the treatment of chronic and acute laryngeal diseases, in bronchitis, asthma, and in membranous croup.

This operation has never been claimed by M. Trousseau, nor by any of his own countrymen for him, as I shall be able still farther to prove.

By referring to the work of Trousseau and Belloc, it will be seen that when they desired to cauterize the "top of the larynx" the operation was performed after this manner:

"We saturate completely," they say, "our sponge with a solution of nitrate of silver; that done, we cause the mouth to be opened wide, depress the tongue with the handle of a spoon, and introduce the port-caustic. As soon as it has passed over the isthmus of the gullet, it produces an effort of deglutition, which raises the larynx. We seize this moment for bringing forward the sponge, which, in the first part of the operation, had been carried to the entrance of the œsophagus. By this means we reach the opening of the larynx, by elevating the epiglottis; and then, by pressure, it is easy to express the caustic solution into the larynx."\*

This account of MM. Trousseau and Belloc's method of operating is also given in full, in my work on bronchial diseases. Since the publication of this work, some of the British writers have claimed for Sir Charles Bell priority in the application of caustic to the aerial mucous membrane. In a

\* Nous imbibons complètement notre éponge d'une solution de nitrate d'argent; cela fait, nous faisons ouvrir largement la bouche, nous abaïssons la langue avec le manche d'une cuiller, et nous introduisons le porte-caustique. Dès que l'on a dépassé l'isthme du gosier, il s'opère un mouvement de deglutition qui porte le larynx en haut. Nous saisissons ce moment pour ramener en avant l'éponge, qui, dans le premier temps de l'opération, avait été enfoncée jusqu'à l'entrée de l'œsophage. Par cette manœuvre, on revient sur l'entrée du larynx en relevant l'épiglotte, et il est facile alors, en appuyant, d'exprimer la solution caustique dans le larynx.—*Archives Générales de Médecine. Tome III, p. 313, 1838.*

work recently issued from the London press, by Dr. John Hastings, "on Diseases of the Larynx and Trachea," and their treatment "by the local application of caustics," the author remarks: "This mode of treatment appears to have been first employed by our distinguished countryman, Sir Charles Bell, who little conceived how valuable it would eventually be found, or how extensively it would be employed."\*

Dr. Hastings admits that "the great merit of its revival is mainly due to Dr. Horace Green, of the United States, who published the first work that has been wholly devoted to this subject; and it is only doing justice to Dr. Green to acknowledge the great value of his labors in this new field of inquiry. But so little attention and consideration had the treatment received from the medical world, that in some of the reviews of Dr. Green's works in this country, the critics seem to have been wholly unaware of the labors of Sir Charles Bell, and awarded to Dr. Green the merit of its introduction, instead of giving it to their own countryman."† The operations of Sir Charles Bell consisted in his having performed cauterization of the larynx, in several instances, as early as 1816; twenty-one years before the publication of the work of MM. Trousseau and Belloe. In the "Surgical Observations," &c., of Charles Bell, published in London, in 1816, will be found a record of these cases. In one instance, noticed in this work, a young woman was brought into the hospital with extensive ulcerations of the glottis. Mr. Bell's manner of operating in this case, is thus described by himself: "I made a small pad of lint, and attached it to the ring of a catheter wire, and bent the wire so as to pass over the tongue and epiglottis; I dipped the lint in a solution of twenty grains of the caustic to half an ounce of water, and touched the glottis with it in this manner. With the finger of my left hand I pressed down the tongue, and stretched the forefinger over the epiglottis; then, directing the wire along my finger, I removed the point of the finger from the glottis, and introduced the pad of lint into the opening, and pressed it with my finger."‡

This treatment was "considered hazardous," and Sir Charles Bell did not continue to employ it. "That great man," says Dr. Hastings, "was too much occupied with other pursuits to work out the discovery in the manner it deserved. I call it a discovery, because it was previously, and by most practitioners is still, believed to be utterly impossible to pass any foreign body into the larynx and trachea, without producing violent spasm or even suffocation. Such opinions have often reached me, coming from men occupying the highest walks in their profession, who ought to be imbued with

\* Treatise on Diseases of the Larynx and Trachea. By John Hastings, M. D., &c. London. Introduction, p. v.

† Op. Citat, p. xi.

‡ Surgical Observations, being a Quarterly Report of Cases of Surgery. By Charles Bell: London, 1816, page 34.

a sufficient degree of liberality to prevent the condemnation of a practice, or, indeed, the denial of its practicability, for no better reason than that they do not understand it themselves.”\*

Besides Sir Charles Bell, there are several other English surgeons for whom some credit has been claimed by foreign writers, for the revival of this practice, since Mr. Bell's day. Mr. Vance, a naval surgeon of eminence in London, was in the habit of employing topically a solution of nitrate of silver, in the treatment of laryngeal diseases. Mr. Vance does not appear to have left any record of his labors on this subject; but from the great success he met with in practice, Mr. Hastings thinks he must have applied the solution both to the larynx and trachea; although medical men, who were intimately acquainted with his mode of practice, have informed Mr. Hastings “that he never introduced the solution of the nitrate of silver below the glottis, but contented himself with sponging the back of the throat.”†

Dr. Stokes, in his work on “Diseases of the Chest,” remarks: “The best means of applying these caustic lotions is that practised by Mr. Cusack: a brush of lint, of the requisite size, is sewed on the end of the finger of a glove, which is then drawn on the index finger of the right hand. The patient should be made to gargle with warm water; and the lint, being dipped into the solution, can be at once, and with great facility, carried to any part of the pharynx, and even to the rima.”‡ After the death of Mr. Vance, no one was found, Mr. Hastings says, to take up the treatment which had proved so successful in the hands of this surgeon, and it remained entirely neglected in London, until revived by himself, after the publication of my work in 1846.

This, then, constitutes a brief history of what has been done in Europe, by those who have employed the local application of caustics, in the treatment of diseases of the air-passages. By this, it will be seen, that no one had succeeded, or claimed to have succeeded, in passing the sponge-probang, wet with the caustic solution, into the larynx, until after the announcement in my work, published in 1846, that “it is an operation which, in the treatment of laryngeal disease, I have been in the practice of performing every day for several years.”

Previous to that time, the medication of the larynx and trachea by cauterizations, in the numerous forms of disease of these organs, had only been ventured upon by a few individuals in Europe; and in the practice of these, it was limited to the “sponging of the back of the throat,” or, at the most, to the application of the solution to the aperture of the glottis, or, by pressure of the sponge, to the discharge of the fluid into the larynx. In

\* Op. Citat. Introduction, p. xii.

† Op. Citat. Introduction, p. viii.

‡ A Treatise on Diseases of the Chest, page 258.



this country, so far as I am aware, previous to that time the employment of caustic solutions to the interior of the larynx and trachea, was "entirely neglected." Now this treatment receives the sanction of, and is employed by, the most eminent men of our profession, not only in my own but in almost every country in Europe. It has not only proved successful in the treatment of follicular disease of the air-tubes, and in the ordinary forms of angina, but eminently so in the management of many cases of whooping-cough, and of membranous croup. If there is any honor in the revival and introduction of this practice, *that honor I claim*; and, inasmuch as some of my own countrymen, from its first introduction, have labored anxiously, and are yet striving, to rob me of this honor, I may be excused, I trust, for calling in here the testimony generously granted by foreign writers, in my favor:

"Having thus given an ample analysis of Dr. Green's work," say the editors of the *British and Foreign Medical Review*, "it remains with us to propound briefly a critical estimate of its value. \* \* \* \* It would appear, from various testifying documents, which the author has collected in an Appendix, that his statement as to the practicability and safety of topical medication in laryngeal disease, was met by some of his countrymen by a sneering incredulity. There can be no doubt, however, that this part of the question is set entirely at rest; nor does the previous publication of the methods used by Bell, Vanee, and Trousseau and Belloc, detract at all from the merit due to Dr. Green, for his persevering and successful attempts to render the treatment of some forms of pulmonary diseases more effectual and certain.

"We have adopted this mode of treatment recommended by him, and can corroborate his statements as to its great value. Cases of pulmonary affection have, in our hands, been brought to a satisfactory termination, which we are quite sure, under the treatment ordinarily adopted, would have terminated fatally; and we remember individuals whose cases terminated fatally, who (we feel equally certain) need not have died, at least of that disease which cut them off. This much is due to Dr. Green."\*

In a review of the same work, in the "London Medical Gazette," after an allusion to what others have accomplished in this branch of practical medicine, the reviewer says: "The French pathologists may have anticipated the author, in some degree, by the local application of the nitrate of silver to the fauces; but Dr. Green was the first to extend its use successfully to parts *below the epiglottis*, in various inflammatory diseases of the vocal organs."†

\* British and Foreign Medical Review. Vol. XXIV, p. 504.

† London Medical Gazette, Vol. IX, p. 1065.

In the "Dublin Quarterly Journal of Medical Science," the subject is also discussed, and the following conclusion announced. "MM. Trousseau and Belloc employed a solution of the strength of two drachms to the ounce, or sometimes to the half-ounce, of distilled water. Their method of applying it was either by means of a small silver syringe, with a long, curved tube, which could be introduced beyond the epiglottis, or by saturating a bit of sponge, attached to a rod of whalebone, which, being pressed firmly against the back of the pharynx, discharges some of the solution into the glottis, principally by the involuntary effort of deglutition which it excites. This latter method we have ourselves frequently used with much success. But Dr. Green has found another method of applying the solution to the laryngeal mucous membrane, so simple and so efficacious, that, as we before remarked, he has been induced to publish this volume upon its merits.

\* \* \* \* \*

We shall only say, that we are fully convinced of the originality of observation displayed by our author, and of the perfect truth of the statements contained in his Treatise."\*

It is well known that Professor Bennett, of the Edinburgh University, has adopted extensively, topical medication in the treatment of laryngeal and kindred diseases, in the Royal Infirmary and in his private practice. In his clinical lectures on the subject, published in the "Edinburgh Monthly Journal of Medical Science," he remarks: "This practice, introduced by Dr. Horace Green, of New York, consists in the direct application of a solution of nitrate of silver to the interior of the larynx and trachea. Numerous attempts had been made, with more or less success, by Sir C. Bell, Mr. Vance, Mr. Cusack, and MM. Trousseau and Belloc, to carry this practice into effect; and the results obtained, even by their imperfect efforts, exhibited the great advantages which were to be derived from it, in the treatment of laryngeal diseases. Now, thanks to Dr. Green, we can with safety and certainly apply various solutions directly to the parts affected."

In reporting the above clinical lectures, the history of two cases of interest are given by Professor Bennett, in the treatment of which he saw, for the first time, the application of caustic to the interior of the larynx and trachea. It occurred in the summer of 1851, when, on a visit to Edinburgh, I was invited by Dr. Bennett to visit the Royal Infirmary, and to perform the operation on several patients in his ward, who were suffering from *laryngeal phthisis*. I quote these cases as abbreviated in Braithwaite's Retrospect.† The first case alluded to, was one of an aggravated form of chronic laryngitis: "On the 30th of June, notwithstanding the assiduous use of astringent gargles, occasional sponging of the fauces with solution of

\* The Dublin Quarterly Journal of Medical Science, Vol. IV, p. 441.

† No. XXIV., page 99.

nitrate of silver, and the application of leeches, the patient was evidently worse, and he could only speak in a whisper.

*“July 6th.*—To-day, Dr. Horace Green, of New York, who went round the wards with Dr. Bennett, stated that this was a remarkably good example of what he had named follicular disease affecting the larynx. He passed the sponge, saturated with a solution of nitrate of silver (℥ij. to ʒj. of water), through the larynx into the trachea. The patient could not take a breath for some seconds afterwards, and described the sensation as like that produced by a piece of food ‘passing down the wrong way, and causing choking.’ The immediate effect of the operation was decided improvement of the voice, and more ease in deglutition. From this time, his symptoms gradually left him. On the tenth, the sponge was again passed into the larynx by Dr. Bennett, and produced the same sense of temporary suffocation; but immediately afterwards he spoke with perfect clearness of voice. The application was made every second day, until the 16th, when all the laryngeal symptoms had disappeared, the voice was normal, and there was no cough, expectoration, pain, or difficulty of deglutition. He now left the house.”

*“Case 2.*—Helen Guthrie, æt. 25, married, a fisherwoman, admitted into the clinical ward, July 4th, 1851. Four months ago was seized with a cough, attended with hoarseness of the voice, dryness of the throat, painful deglutition, and pain in the larynx, which symptoms have continued with greater or less intensity up to the period of admission. Latterly, there had been considerable expectoration of purulent matter, often tinged with blood. On admission, she complains of cough coming on in paroxysms, dryness in the throat, and pain in the larynx, voice cracked, and occasionally absent. There is no difficulty in swallowing, but copious expectoration of frothy mucus. Can inspire without difficulty. Percussion over chest elicits nothing abnormal. On auscultation, the inspiratory murmur is harsh over superior third of chest on both sides. Over larynx and trachea there is heard a dry, snoring sound. On examining the fauces, red patches were observable here and there, with slight erosion on the left side. The fauces and epiglottis were sponged with a solution of nitrate of silver (℥j. to ʒj. of water). This was repeated on the following day, and the voice was evidently improved. On the 6th, the sponge, saturated with the solution, was passed into the larynx, by Dr. Horace Green, of New York, and produced no feeling of suffocation whatever. It was passed afterwards every day by Dr. Bennett, till the 14th, when she left the house, all the laryngeal symptoms having disappeared, and the voice nearly restored to its proper tone.”

It was during this same visit to Great Britain that, whilst in London, I was requested by Drs. Quain, Williams, Cotton, &c., physicians of the Hospital for Consumption and Diseases of the Chest, at Brompton, to meet



these gentlemen and their associates, at the wards of this charity, and perform in their presence the operation of cauterizing the interior of the larynx and trachea. This I did on two different occasions, and performed the operation on many patients in the presence of the medical staff of this institution, and other distinguished members of the profession.

In Dr. Cotton's excellent work, since published, on Consumption, the author candidly admits his previous unbelief in, and present changed views with regard to, the practicability or propriety of topical medication to the mucous membrane of the respiratory passages. The admission is honorable to himself, and worthy of imitation. "I should here remark," observes Dr. Cotton, "that my own views upon this subject differ from those I formerly held, and have even expressed; and that I owe this change to the kindness of Dr. Horace Green, of New York, the justly celebrated advocate of this treatment, who, during a recent visit to our metropolis, convinced myself and others, not only of the possibility, but of the safety and usefulness of the practice.

"I had long been in the habit of using a solution of nitrate of silver to the pharynx and upper surface of the epiglottis, by means of a soft brush.  
\* \* \* But I had never ventured to apply any thing directly to the larynx itself—not from any doubt as to its possibility, but from misgivings as to its effects, and apprehension of its danger. For some months past, however, I have done so extensively in cases of chronic laryngitis, whether idiopathic or tubercular, and very frequently with marked success. \* \* \* I have known the voice regained, the irritable cough removed, and the tenderness and difficulty of swallowing dissipated entirely by it; indeed, I think we might also speak of its *curative* effects (so far, at least, as the larynx is concerned) in some very early cases."\*

In conclusion, I beg to be permitted to give the testimony of M. Trousseau himself on this question; the man to whom of all others many of my own countrymen (for Dr. Adams is not alone in this matter) have labored, ever since the issue of my treatise, to give all the merit for the introduction and practice of topical medication.† For M. Trousseau I entertain the

\* "The Nature, Symptoms, and Treatment of Consumption;" being the Essay to which was awarded the Fothergillian Gold Medal of the Medical Society of London. By Richard Payne Cotton, M. D., Member of the Royal College of Physicians, London, &c., pp. 236-7.

† In proof of this, I would refer the reader to the notices of my works on "Diseases of the Air Passages," and on "Membranous Croup," by American reviewers; particularly to the reviews of these treatises by a writer in the "American Journal of Medical Sciences." Of the character of these reviews in this Journal, with regard to *fairness, impartiality, and justice*, as well as of the merit or demerit of the works reviewed, I am quite willing to leave the candid and unprejudiced portion of the profession to judge.

highest respect. By his professional labors, and through his many important contributions to practical medicine, he has gained a distinguished reputation, not only in his own country but throughout Europe and America. During a visit to Paris, two years ago, I had an opportunity, through his friend Dr. Simpson, of Edinburgh, to make the acquaintance of Professor Trousseau. We had several conversations on this subject of topical medication. In answer to his inquiries, I gave him the full particulars of my own operations, in which he appeared much interested—particularly so when I related to him what had been accomplished in this country in the treatment of membranous croup by cauterization. In this connection, I gave him my reasons for *not* performing tracheotomy under the circumstances in which he has been accustomed to operate; that, for many years, I had employed cauterization of the larynx in any and every stage of the disease, by means of which others, as well as myself, had saved, I believed, many lives; and that I had come to the conclusion, that if *this* operation failed, it would be useless to employ tracheotomy. He desired me to give him the size, shape, &c. of the instrument I employed, and assured me that he would attempt the operation in the first case of croup that should occur in his practice.

After my return home, during the last year, M. Trousseau obtained, through Prof. T. Childs, of Pittsfield, who was then in Paris, half a dozen of my sponge-probanga, and the bent spatula which I employ for depressing the tongue. A few months since, I received from Dr. Trousseau a very kind letter; and as its statements are conclusive on one point in this matter, I shall take the liberty of giving the concluding portion of it.

\* \* \* “J’ai reçu aussi, et j’ai lu avec une grande attention, votre ouvrage sur la cauterization de l’intérieur du larynx. Avec l’abaisse-langue que vous avez imaginé, et dont M. le Dr. Child m’a donné le modèle, on peut aisément voir l’épiglotte; mais j’éprouve toujours beaucoup de difficulté à pénétrer jusqu’aux cordes vocales. Il y a aussi quelques uns de mes malades qui ont éprouvé des accès de suffocation effrayants, quoique j’eusse agi, suivant vos recommandations, avec une extrême rapidité.

“Au demeurant, grâce à votre excellent abaisse-langue, j’obtiens aujourd’hui, par la medication topique, des succès qui étaient bien plus rares auparavant.

“Agréez, monsieur, et honorable confrère, l’assurance de mes sentiments les plus distingués.

“A. TROUSSEAU.”\*

---

\* “I have also received, and read with great attention, your work upon the cauterization of the interior of the larynx. With the tongue-spatula which you have invented, and of which Dr. Childs has given me a model, the epiglottis can easily be seen; but I always experience much difficulty in penetrating to the vocal cords. There are, also, some of my patients who have experienced frightful parox-

This *exposé* of the unjust and unprofessional course pursued by Dr. Adams, has been made by me, I confess, with great reluctance. Had Dr. A. confined himself, in his characteristic labors, as he and his coadjutors have done heretofore (for this is by no means the first time—as hundreds of the profession well know—that he and they have consorted together for the professional injury of others), to their own country, and among their own countrymen, I should have suffered these things, for very obvious reasons, as I have done through many years, to pass altogether unnoticed. But “John G. Adams” in Paris, with the honorable suffix to his name of “*ancien Secrétaire de l’Académie de Médecine*,” etc., when he presents himself with his cards of introduction to Trousseau, or Chomel, or Louis, or Robert, is, in their estimation, a different man from *Dr. Adams, of New York*, and possesses power under such circumstances, if disposed, to effect altogether more mischief than at home.

For the honor of American physicians, as well as to protect myself, I have endeavored to expose, and would protest against, these efforts made to interrupt those pleasant relations which have been established between the members of the profession abroad and those of our own country.



